

IX. *An Account of the Hermaphrodite Lobster presented to the Royal Society on Thursday May the 7th, by Mr. Fisher of Newgate-Market, examined and dissected, pursuant to an Order of the Society. By F. Nicholls, M. D. Præl. Anat. Oxon. F. R. S.*

THE World has frequently been amused with Appearances proper to both the Sexes, in Persons who have from thence termed themselves *Hermaphrodites*: But such of them as have passed a more strict Examination, have proved, that those Appearances were either morbid Cases, or præternatural Formations of the Parts proper only to one Sex. Thus an elongated *Clitoris* has passed for a *Penis*, and *scatomatous* (or other) Tumors of the *labia pudendi* have been thought *Testicles*, while the subjacent *Vagina* has been the only Proof of the Existence of the Parts proper to both Sexes in the same Subject. So that at present the Existence of præternatural Hermaphrodites seems universally denied. Nor is it easy to conceive, how an Hermaphrodite can be formed in a Species whereof each Sex has the Parts subservient to Generation, single and necessarily situated in the same Parts of the Body; at least without either a very remarkable Mal-formation of the Body in general, or so perverted a Situation of those Parts, as must very much impair their Uses.

But in those Animals whose Parts of Generation are double and independant on each other, as the Lobster, Crab, and many Birds, the Parts proper to both Sexes may possibly be formed in the same Subject without Prejudice to their Uses: But in that Case the several Parts can be but single; and consequently, the Subject

so formed cannot be termed perfect as to its Species, in regard to either Sex, though it may be perfectly of both Sexes so far as regards Generation.

Under this Idea of an *Hermaphrodite*, I may venture to say, the Lobster referred to my Examination is truly one ; and, if split from Head to Tail, is Female on the right Side, and Male on the left Side.

In Order to illustrate this, I shall give a short Account of the Structure of the male and female Lobster, so far as relates to the Difference between the two Sexes, and then proceed to shew in what Manner they were combined in the Subject before you.

It has already been observed that the Lobster, both male and female, has all the Parts of Generation double, except that the female has one Passage only, through which it is probable the *Ova* are emitted out of the Trunk, in Order to be affixed to the small Appendages under the Tail.

The *Penis* of the male Lobster arises from the Testicle, and is no more than a Continuation of the *Vas deferens* ; it is reflected and retored once, after which it grows thicker, as to its Substance (probably forming a *corpus cavernosum*) and terminates, not in the last Leg but one, as *Willis*, in his Treatise *de Animâ Brutorum* has observed, but at a small perforated Tubercle in the first Bone of the last Leg. See *Fig. the 1st, A A, the two Penes.*

Between the two last Legs and the two Legs above them are two Processes, which, from their resembling the *Nymphæ* of Women, I shall term *Nymphæform Processes*. These Processes are covered with Hair, and unite at their Bases without leaving any Passage. *Fig. the 1st, B B, the two Nymphæform Processes.*

Below the two last Legs, towards the Tail, are two Appendages, which, from their Similitude, I shall

term the *styliform Appendages*. These in the Male are thick, hard, and void of Hair. *Fig. the 1st, C C, the two styliform Appendages.*

The Tail is continued from the Trunk in a gradual Decrease of its Dimension, and is covered by Plates, which extend themselves but little below the Substance of the Tail, and terminate in acute Angles, without any Ways diverging. *Fig. the 1st, D D, the Terminations of the Plates.*

It is to be observed, that sometimes these Plates are edged with short and thin Hair, and sometimes have no Hair.

The Female on the other Hand, in the Place of the Testicle has an Ovary, which, like the Testicle, extends itself from the Stomach to near one half of the Tail. From the Middle of the Ovary a Duct descends to the Legs, which opens at a round Hole edged with Hair in the first Bone of the last Leg but two: This is the Uterus. *Fig. the 2^d, A A, the Entrance into the two Vaginæ.*

The two Processes, which I have termed *Nymphæform*, in the Female make a more obtuse Angle at the Union of their Bases; are less hairy, and leave a Passage, through which it is probable the *Ova* are emitted, to be affixed to the Appendages under the Tail. *Fig. the 2^d, B B, the two Nymphæform Processes; D, the Passage for the Ova.*

The two styliform Appendages in the Female are soft, thin, and edged with long Hair. *Fig. the 2^d, C C, the two styliform Appendages.*

The Plates covering the Tail are extended much farther under the Tail than in the Males, beside which they diverge, in order to leave a greater Space for containing the *Ova*; for the better Defence of which they terminate broad, and are edged with thick and long Hair. *Fig. the 2^d, F F, the Terminations of the Plates covering the Tail.* In

In the *Hermaphrodite Lobster* I found all these Parts proper to both Sexes regularly disposed, but in such Manner that the Parts proper to the Female were to be found only on the right Side, and the Parts proper to the Male only on the left Side.

In the antepenultimate Leg the *os uteri* was very obvious on the right Side, as in the Females, but had not the least Mark of any such Passage in the same Leg on the left Side. *Fig. the 3d, A, the os uteri only on the right Side.*

The *Nymphæform Process* on the right Side made an obtuse Angle at its Insertion into the Body, and was soft and perforated as in the Females, while the corresponding Process made a less Angle, was more hairy and rigid at its Basis, as in the Male. *Fig. the 3d, B, the right Nymphæform Process; C, the left Process.*

The *styliform Process* on the right Side was soft, flat, and edged with Hair, as in the Female; but on the left Side it was stiff, hard, and void of Hair. *Fig. the 3d, D, the right styliform Process as in the Female; E, the left styliform Process, as in the Male.*

In the last Leg on the left Side the perforated Tubercle for the Passage of the *Penis* (as in the Male) was very conspicuous, but without the least Appearance of such Tubercle in the corresponding Leg on the right Side. *Fig. the 3d, (H) the perforated Tubercle for the Passage of the Penis.*

The Plates covering the Tail were extended on the right Side considerably below the Substance of the Tail, and were edged with thick and long Hair, and terminated broad, as in Females. *Fig. the 3d, F, the Termination of the Plates covering the Tail.*

On the left Side, these Plates were much less extended below the Tail; were almost totally void of Hair, and terminated in acute Angles. *Fig. the 3d, (G)*

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the Termination of the Plates covering the Tail on the left Side.

These Plates diverged likewise on the right Side, as in the Females, but not on the left Side, as in the Males.

Fig. the 4th, A, the diverging of the Plates on the right Side; B, the Plates no Ways diverging.

Upon removing Part of the great Shell, I found the internal Parts of Generation in both Sexes exactly corresponding to those externally described.

In the right Side adjacent to the Heart, the *Oviduct* was regularly disposed, it was full of *Ova*, and sent off its *Oviduct* or *Uterus*, to the antepenultimate Leg. *Fig. the 4th, F, the Ovary; G, the Oviduct or Uterus leading to the antepenultimate Leg.*

In the left Side the Testicle was rightly disposed as to its Form, Substance, and Situation; Part of which I was obliged to remove, in Order to shew the *Penis*, which terminated as in all Males, at the Tubercle in the first Joint of the last Leg. *Fig. the 4th, E, the Penis; I, Part of the Testicle unremoved.*

I had some Thoughts of removing so much of the great Shell as was necessary to shew the Course and Terminations of the *Uterus* and *Penis*, at their proper Orifices. But considering that by that Means the Tail would too easily separate from the Trunk, and the Appearances of the other Marks be rendered less obvious; I chose only to lay them open at the Back, believing that to be sufficiently satisfactory to those who understand the Structure of that Animal. I have steeped it in three different Spirits, and carefully disposed it in a Glass, which I have stopp'd in the best Manner I can, that it may remain in the Repository, as an undeniable Proof of so remarkable a Fact.

F I N I S.

Fig. 1.

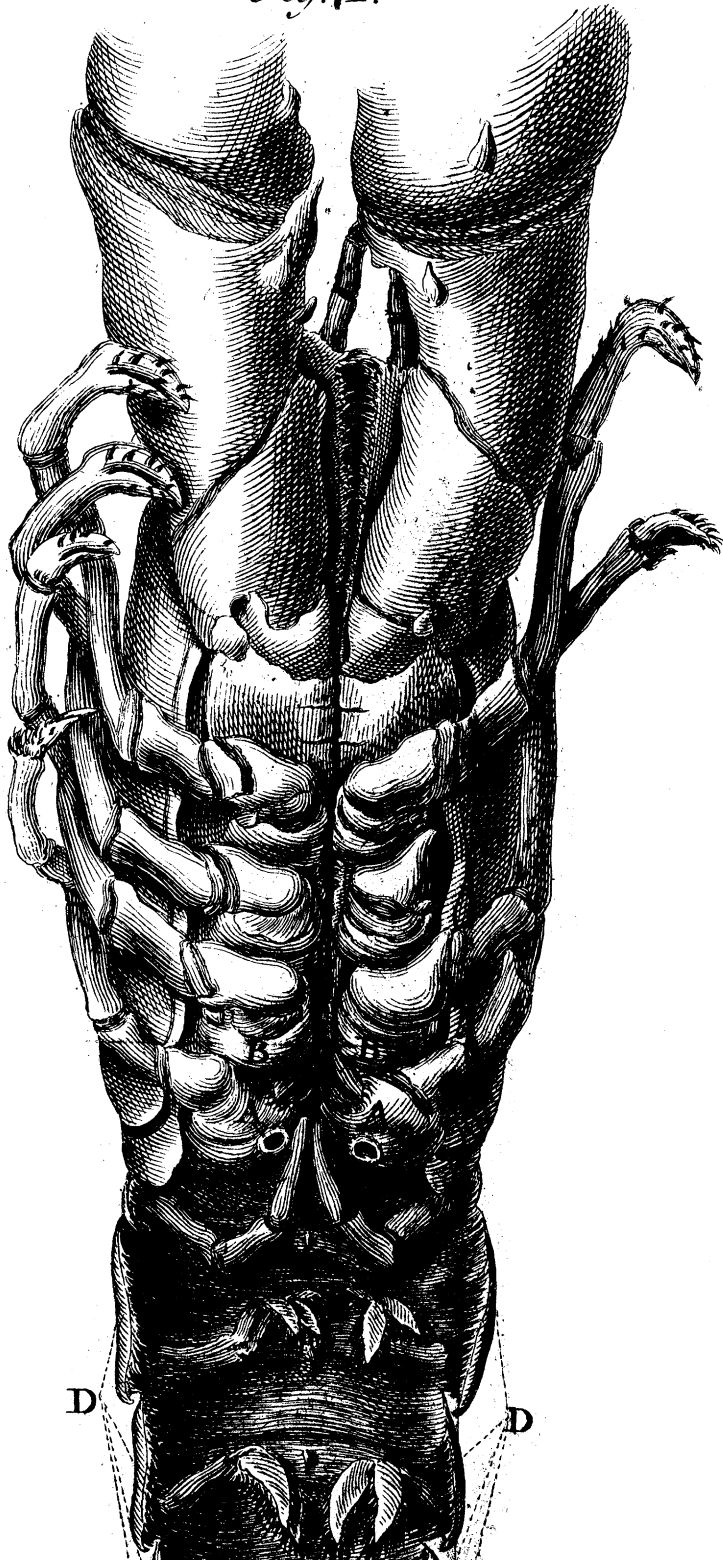


Fig. 2.

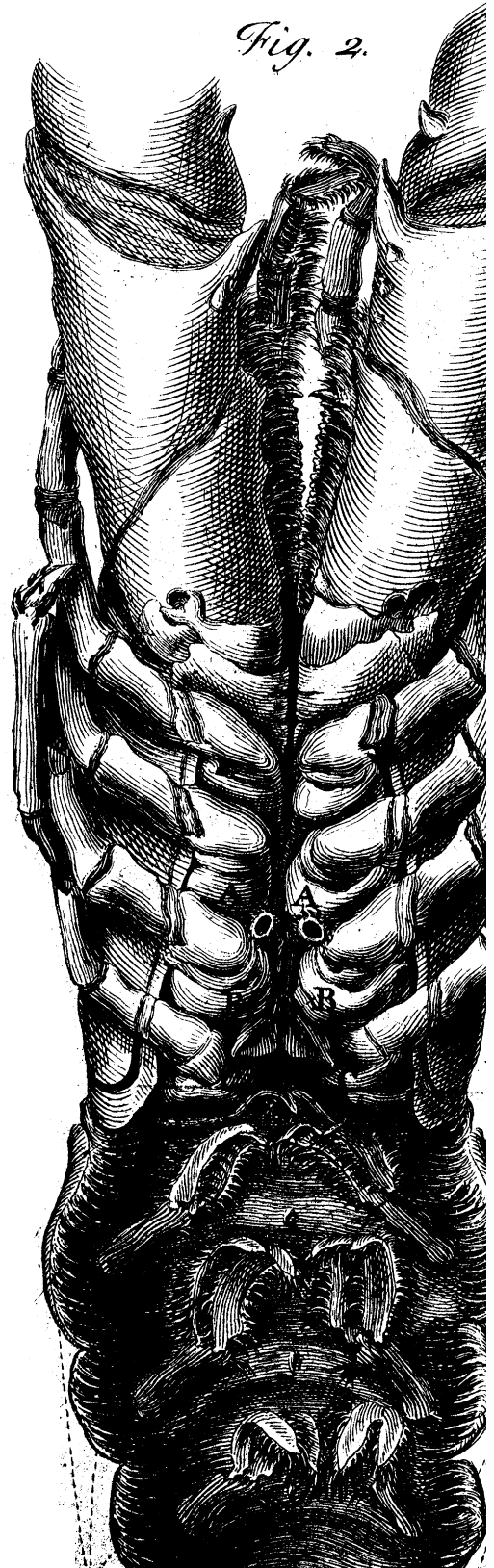


Fig. 3.

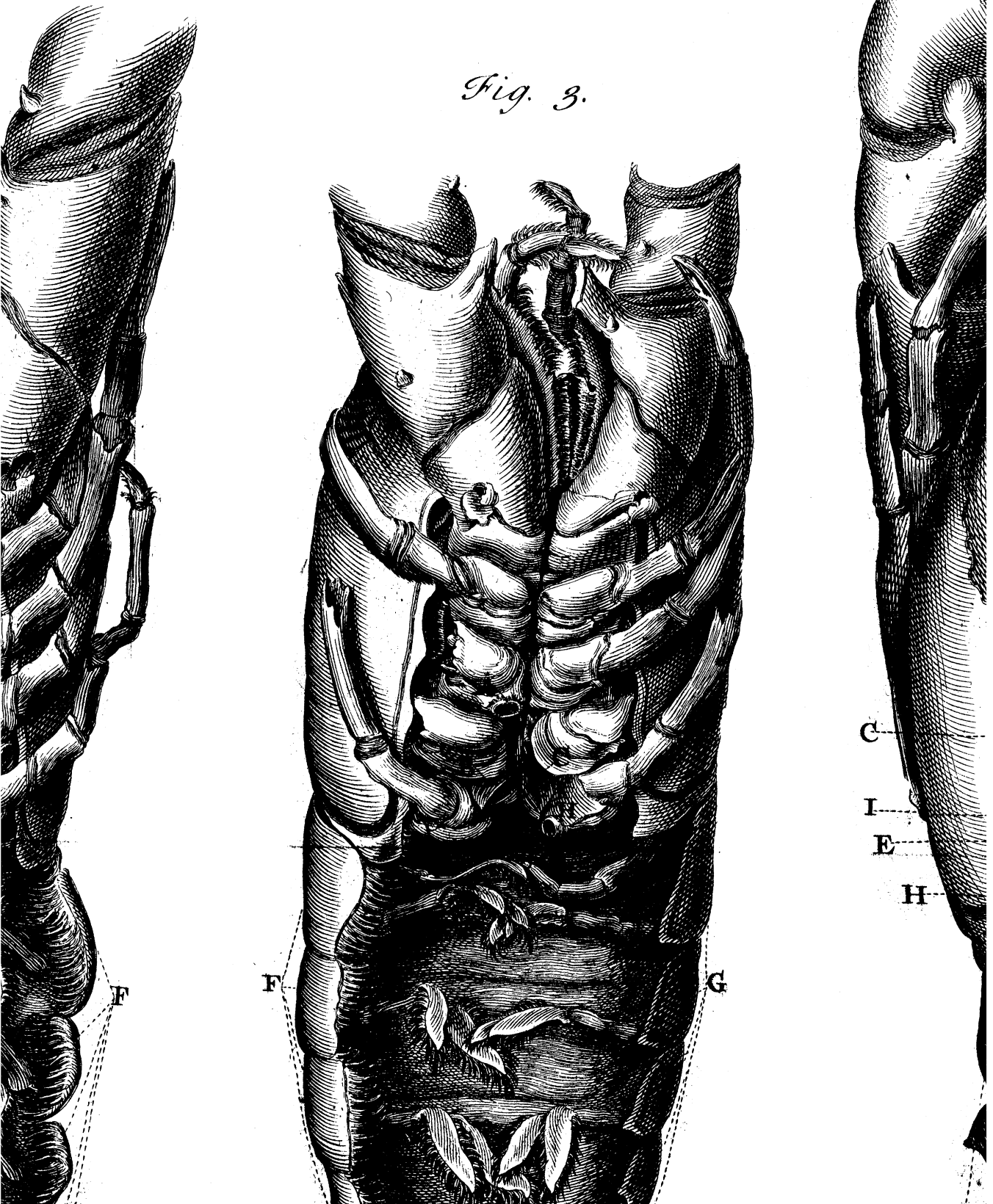
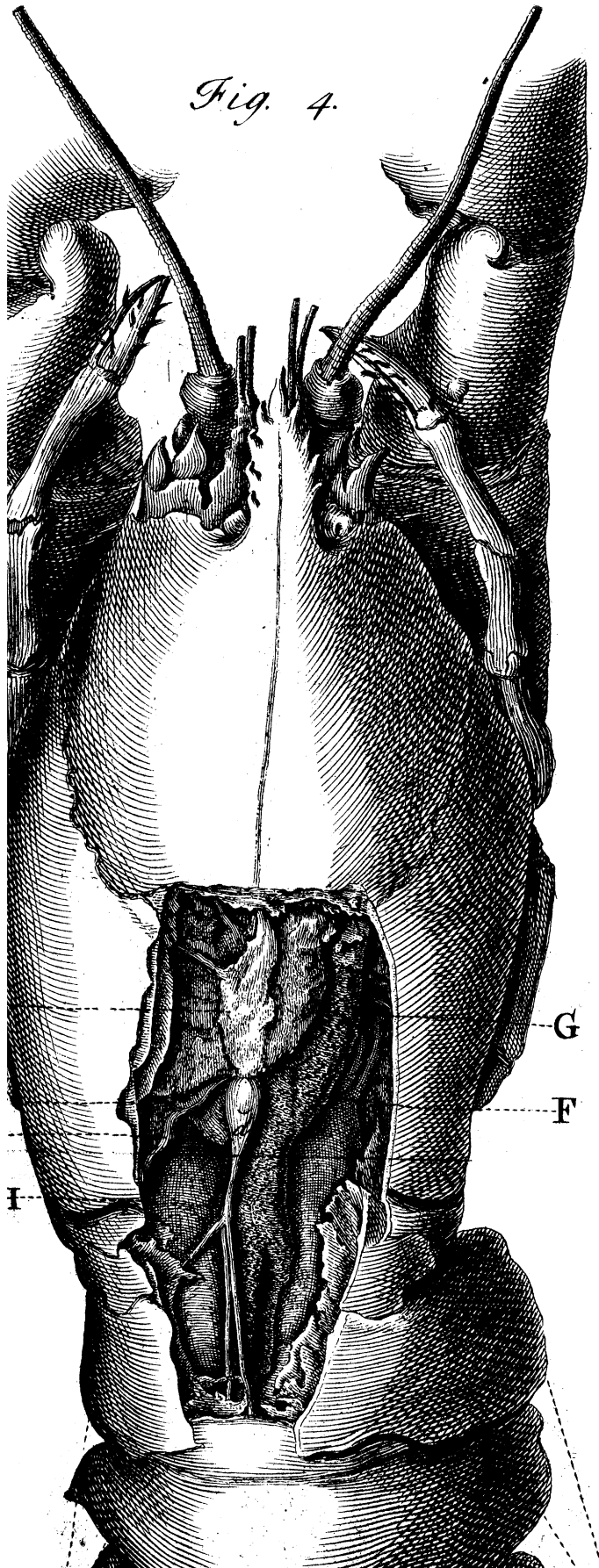
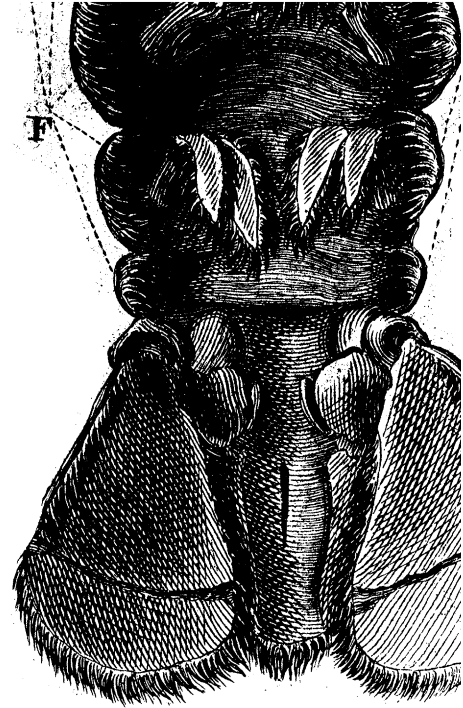
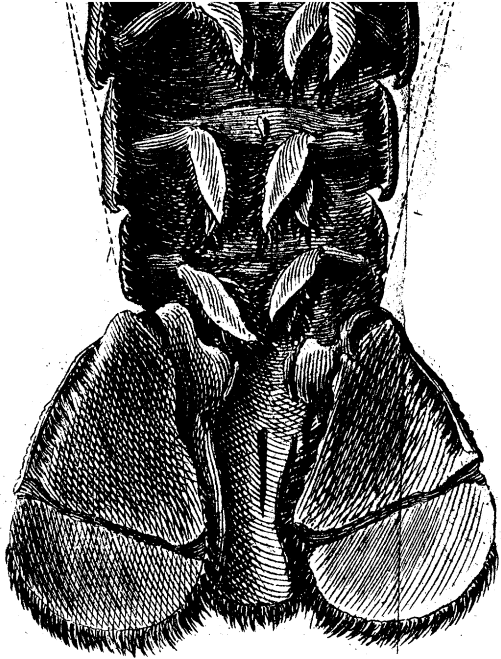
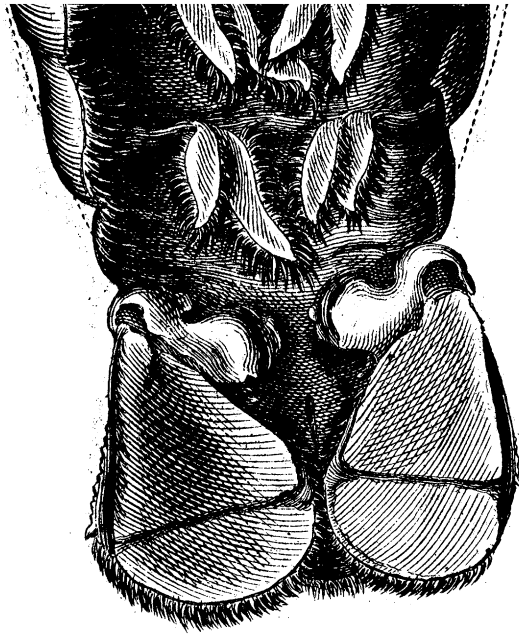
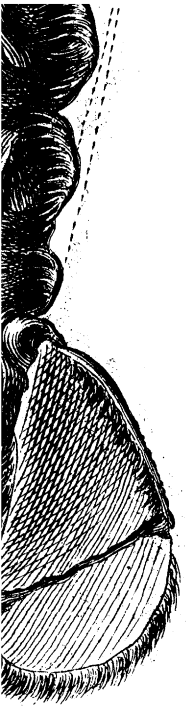


Fig. 4.







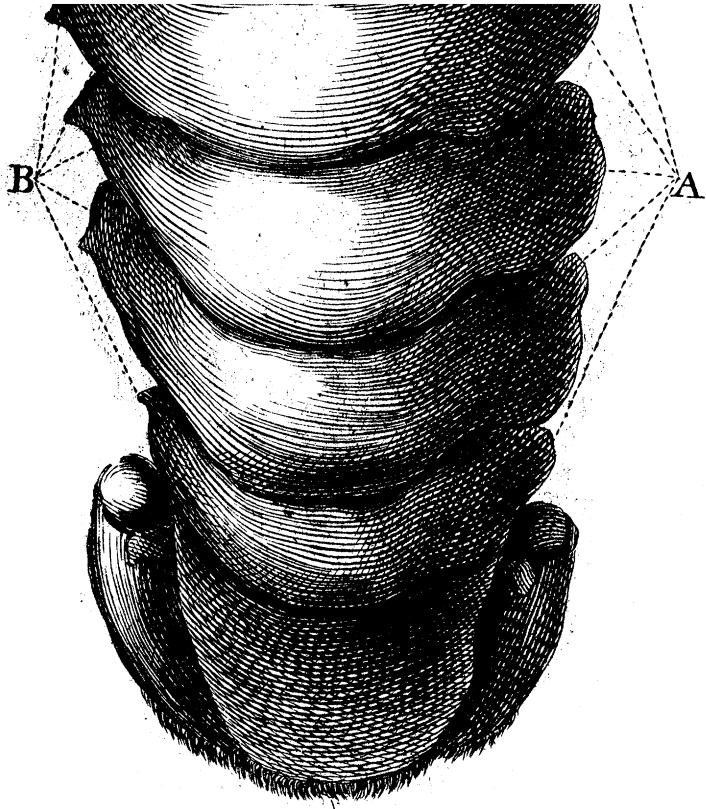


Fig. 4.

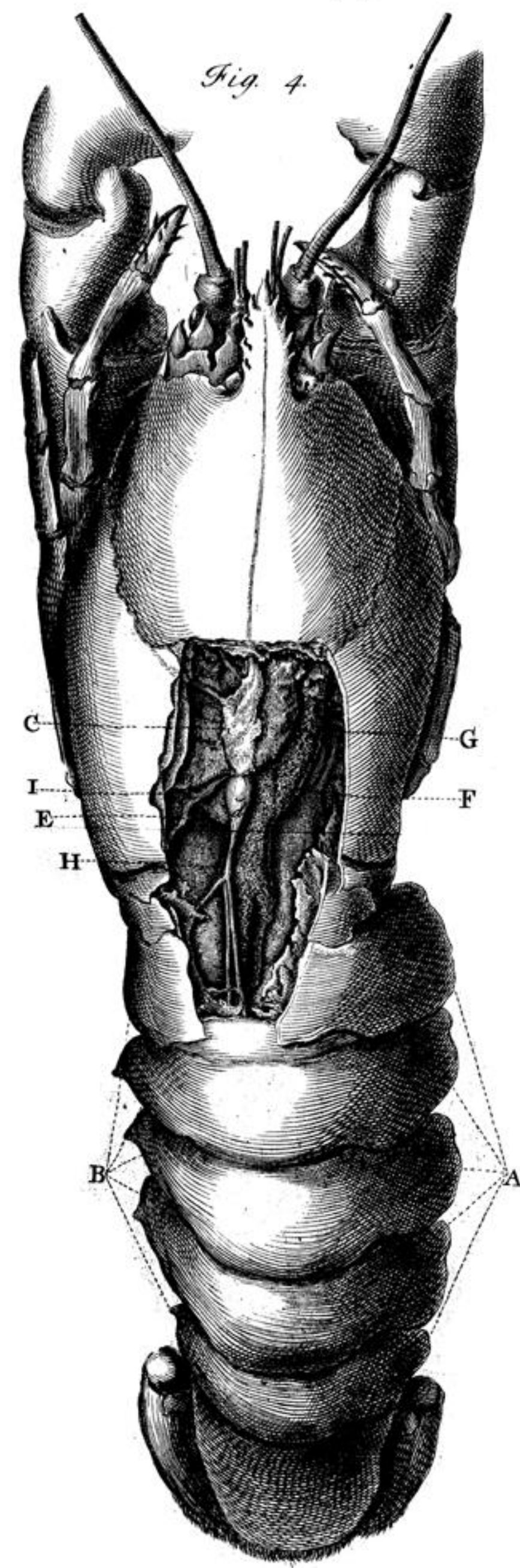


Fig. 3.



Fig. 2.



Fig. 1.

